

What is claimed is:

1. A transmit-receive FM-CW radar apparatus which switches between transmission and reception by time division control, wherein an amplifier capable of gain control is provided in a transmitter signal path or a receiver signal path, and wherein when said amplifier is provided in said receiver signal path, said amplifier is controlled so as to suppress said gain in a first half of a receive timing interval, while when said amplifier is provided in said transmitter signal path, said amplifier is controlled so as to suppress said gain in a second half of a transmit timing interval.

2. A transmit-receive FM-CW radar apparatus as claimed in claim 1, wherein amplifiers are provided in said transmitter signal path and said receiver signal path, respectively, and said switching between transmission and reception is performed by operating said amplifier provided in said transmitter signal path and said amplifier provided in said receiver signal path in alternating fashion in synchronism with said transmit and receive timings.

3. A transmit-receive FM-CW radar apparatus as claimed in claim 1, wherein the suppression of said gain is performed in such a manner as to reduce the amount of said suppression gradually from a leading edge toward a midpoint of said receive timing interval or from a trailing edge toward a midpoint of said transmit timing interval.

4. A transmit-receive FM-CW radar apparatus as claimed in claim 2, wherein the suppression of said gain is performed in such a manner as to reduce the amount of said suppression gradually from a leading edge toward a midpoint of said receive timing interval or from a trailing edge toward a midpoint of said transmit timing interval.

5. A transmit-receive FM-CW radar apparatus as claimed in claim 1, wherein the suppression of said gain

is performed in such a manner as to reduce the amount of said suppression stepwise from a leading edge toward a midpoint of said receive timing interval or from a trailing edge toward a midpoint of said transmit timing interval.

6. A transmit-receive FM-CW radar apparatus as claimed in claim 2, wherein the suppression of said gain is performed in such a manner as to reduce the amount of said suppression stepwise from a leading edge toward a midpoint of said receive timing interval or from a trailing edge toward a midpoint of said transmit timing interval.

7. A transmit-receive FM-CW radar apparatus as claimed in claim 2, wherein a plurality of amplifiers are provided in said receiver signal path, wherein one of said amplifiers is provided with a means for accomplishing said switching between transmission and reception, while the other one of said amplifiers is provided with a means for suppressing said gain in the first half of said receive timing interval.

8. A transmit-receive FM-CW radar apparatus as claimed in claim 1, wherein the suppression of said gain by said amplifier is performed by varying a voltage applied to said amplifier.

9. A transmit-receive FM-CW radar apparatus as claimed in claim 2, wherein said switching between transmission and reception by said amplifiers is performed by varying voltages applied to said amplifiers.

10. A transmit-receive FM-CW radar apparatus which switches between transmission and reception by time division control, wherein an amplifier capable of controlling gain is provided in a transmitter signal path or a receiver signal path, and a multiplier capable of controlling power is provided in said transmitter signal path or in a branch section branching off a directional coupler in said transmitter signal path, and wherein a voltage applied to said multiplier (Mt) provided in said

transmitter signal path is varied so as to suppress power
in a second half of a transmit timing interval, while a
voltage applied to said multiplier (Mr) provided in said
branch section is varied so as to suppress power in a
5 first half of a receive timing interval.